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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,131	09/19/2002	Ronald G. Fink	65564816	9781
39670	7590	05/05/2005	EXAMINER	
BOC, INC.			MYERS, ADAM C	
575 MOUNTAIN AVE			ART UNIT	PAPER NUMBER
MURRAY HILLS, NJ 07974-2064			1761	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,131

Applicant(s)

FINK ET AL.

Examiner

Adam C. Myers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/27/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In this action, claims 1-31 are pending.

Specification

The disclosure is objected to because of the following informalities: On page 11, paragraph 61, "gasket 66" should be "gasket 68," and "fitting 64" should be "fitting 66."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

The terms I) "easy to maintain," II) "easy to manufacture, maintain, and replace," III) "easy to clean and easy to maintain," and IV) "easy to maintain" in claims 1, 18, 28 and 31, respectively are relative terms which renders the claims indefinite. The terms I, II, III and IV are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The degree of "easiness" is not disclosed in the specification or the claim, thus the relation of the level of "easiness" of the instant claims to a level that has been taught in prior art cannot be ascertained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-15, 19-22, and 24-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Goswani.

Goswani teaches an apparatus comprising a hooded means for subjecting air to sanitizers including UV light and hydroxyl radicals (see col. 14, lines 55-63). The system is open, allowing for the passage of air (see Fig. 1), and it would be inherent that the hood would subject air to ozone, since ozone is produced by the action of ultraviolet radiation on oxygen. The hood further comprises one or more UV lights (see Fig. 1 and col. 12, lines 7, 8) and one or more matrix of surfaces (the feature which the examiner has determined would anticipated the target rods) located under the hooded means in optical proximity to the UV light sources (see Fig. 1 and col. 6, lines 20-22). It is the understanding of the examiner that the sanitation of a food item in the instant claims of the instant invention occurs at the surface of a food, or at any point that may be in direct contact with the air around a the food. Thus, for the duration of this action, the examiner sees the sanitizing of air as anticipatory of sanitizing a surface exposed to air, provided the sanitation means or methods therefore are analogous. The teachings of Goswani anticipate that which has been claimed in the instant claim 1.

With respect to claim 4, the hood of Goswani comprises an open-ended reactor area that further comprises at least one drainage hole through a relative top and bottom area (see Fig. 1 and 3).

With respect to claim 5, the matrix of surfaces further comprises a coating of 0-30% titanium dioxide, 0-30% silver, and 0-30% copper by weight (see col. 6, lines 38, 39, and 54-57).

With respect to claim 6, the hood of Goswani further comprises a humidifier design to spray a stream of mist for the production of hydroxyl radicals (see col. 8, lines 5-12).

With respect to claim 7, Goswani teaches the use of humidity in ambient air in order to produce hydroxyl radicals (see col. 7, line 60 to col. 8, line 4).

With respect to claims 8 and 9, the hood of Goswani comprises at least one mounting tab located on the outer surface of one side of the hooded means, and a connector tab connecting at least two mounting tabs on one side of the hood (see Fig. 1).

With respect to claims 10 and 11, the hood of Goswani teaches a microprocessor for controlling a system comprising the hood (see col. 7, lines 38-41). It is inherent that a microprocessor requires electricity to run, thus the anticipation of an electrical box. It is also inherent that the electrical box comprise a removable lid, given the need to both protect the microprocessor and to perform maintenance on or to exchange the microprocessor.

With respect to claim 12, the hood of Goswani comprises a downwardly bent lip (see Figs. 1 and 3).

With respect to claim 13 and 14, the hood of Goswani comprise at least one UV lamp and up to 24 UV lamps (see Fig. 1 and col. 12, lines 7, 8) and a matrix of surfaces comprising at least one surface (see Figure 3) up to 60 surfaces (see Fig. 15).

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With respect to claim 15, as see in Figure 3, the matrix of surfaces of Goswani is singular piece, and may be removed or replaced without further adjustment to the rest of the hood.

With respect to claims 19 through 22, the hood of Goswani further comprises a rigid frame (see Fig. 1), a surface to at least partially reduce radiation emitted from the UV light sources (see Fig. 1), a ballast housing (see Fig. 1), a control box comprising a microprocessor (see col. 7, lines 38-41), and wheels (see col. 10, line 1).

With respect to claim 24, the system of Goswani comprises wheels, as noted above. This feature of the prior art would allow the hood to be easily moved and thus optimally located with respect to the item in need of sanitation.

With respect to claim 25, Goswani teaches a hood comprising means for subjecting air to sanitizing radiation, means for subjecting air to hydroxyl radicals, and as noted above with respect to claim 1, Goswani inherently comprises means for subjecting air to ozone. The air is simultaneously subjected to the three sanitation means.

With respect to claims 26 through 28, the sanitation means of Goswani outlined above further comprise one or more sanitizing radiation sources located in an assembly (see Fig. 3), and a matrix of surfaces with one or more target rods therein (see Fig. 3). As seen in Fig. 3, the matrix of surfaces is a singular piece and may be moved or removed without disruption of the rest of the hood elements. This feature makes the matrix of surfaces easy to clean and easy to maintain.

With respect to claim 29, the hood of Goswani comprises wheels (see col. 10, line 1). An inherent aspect of wheels is that the wheels make an object generally portable.

With respect to claim 31, Goswani teaches a method utilizing a hood system comprising the exposing of air simultaneously to UV light, ozone and hydroxyl radicals.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goswani in view of the disclosure of the EPA. The teachings of Goswani have been outlined above. Goswani also teaches a UV lamp capable of emitting light of wavelengths 300-400 nm (see col. 6, lines 56, 57). What has not taught by Goswani is the use of a UV lamp capable of emitting light of wavelengths 185-254 nm. However, the disclosure of the EPA teaches that optimum range for sanitation by UV rays is

between 245 nm and 285 nm (see Sect. 8.1.1). Given that the objective of Goswani was to optimize sanitation procedures and conditions, it would have been obvious for one of ordinary skill in the art to use a lamp capable of emitting radiation in the range as disclosed by the EPA reference because of the improved sanitation of the radiation of those wavelengths.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goswani in view of Bigelow. In addition to the teaching of Goswani outlined above, Goswani also teaches a UV light as a part of an assembly, the assembly comprising a shield, and the assembly being modular and easy to manufacture, maintain and replace (see Fig. 1, 3). Not taught in Goswani is a reflector tube. Bigelow teaches a UV sanitation system comprising reflective surfaces. The addition of the reflective surfaces enhances the photochemical effect of the invention of Bigelow. Since the sanitation occurring in the invention of Goswani is a photochemical reaction, it would have been obvious for one of ordinary skill in the art to include a reflective surface.

With respect to claim 23, the teaching of Goswani has been outlined above. In particular, Goswani teaches a monitoring system comprising a microprocessor. An alarm system for this control system has not been taught in Goswani. In Kozlowski, a control system comprising a microprocessor is taught, the system further comprising an alarm. Given the necessary composition of air disclosed in Goswani, an alarm would have been an obvious addition by one of ordinary skill in the art in order to notify one of improper air compositions set forth in Goswani.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Myers whose telephone number is 571-272-6466. The examiner can normally be reached on Monday-Friday, 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER